DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023178 Address: 333 Burma Road **Date Inspected:** 02-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. ZHU ZHONG HAI **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the deck plate to deck plate transverse splice weld joint located on 13AW+13BW. The weld is designated as OBW13-001. The welder is identified as 066421. ZPMC QC Mr. HU MEI GANG was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-223(2)1T-ESAB.

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (temporary attachment removal area) located on 12CE at east side. The welder is identified as 044504. ZPMC QC Mr. WANG

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LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as CWR-2126.

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (temporary attachment removal area) located on 12CW at east side. The welder is identified as 067765. ZPMC QC Mr. HU MEI GANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as CWR-2126.

2. NDT:

Ultrasonic Testing (UT) (A, B, C and D-Scan):

UT carried out for the ABF submitted UT Notification No 05022011-1.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as butt joint between bottom plate to side plate hold back weld joint located on 12CE at cross beam side. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: SEG3003A-001.

UT carried out for the ABF submitted UT Notification No 04302011-1.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as corner joint between edge plate to side plate hold back weld joint located on 12CE at cross beam side. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: CA3004-005.

UT carried out for the ABF submitted UT Report No UT-13W-013R1.

This QA Inspector performed Ultrasonic testing (UT) 10 % of the area that has been previously tested and accepted by ABF Quality control personnel. This QA inspector generated a UT (TL-6027) report on this date. The members are identified as corner joint between edge plate to side plate hold back weld joint located on 13AW at counter weight side. According to rejection criteria of "D" Scan procedure that Caltrans QA did not find any Rejected indication at scanning area. The Weld Designation is as follows: SEG3013AA-113.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer